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DATE MAILED: 03/23/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 03/23/2009

Air Liquide Intellectual Property Department Suite 1800 2700 Post Oak Blvd Houston, TX 77056 EXAMINER
RODRIGUEZ, WILLIAM H

ART UNIT PAPER NUMBER
3741

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,310	01/11/2006	Bernard Saulnier	SERIE 5415	8942

TITLE OF INVENTION: METHOD AND SYSTEM FOR SUPPLYING AN AIR SEPARATION UNIT BY MEANS OF A GAS TURBINE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off tions.	or tran ig the l icrwise	smitting the ISSU Patent, advance or in Block 1, by (a	TE FEE and PUBLICA ders and notification of t) specifying a new corn	f ma resp	ON FEE (if requi aintenance fees w ondence address;	red). E ill be and/or	slocks 1 through 5 s mailed to the current (b) indicating a sepa	nould b corresp rate "F	ne completed where condence address as EE ADDRESS" for
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Air Liquide Intellectual Prop Suite 1800		/2009		1.1	hare	Cert	ificate	of Mailing or Trans Transmittal is being ficient postage for first SSUE FEE address 1) 273-2885, on the d	mission	1 itad with the United
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10/564,310	01/11/2006			Bernard Saulnier				SERIE 5415		8942
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nonprovisional	NO		\$1510	\$300	_	\$0		\$1810		06/23/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS						
RODRIGUEZ,	WILLIAM H		3741	060-772000						
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignee is ident h in 37 CFR 3.11. Comp	nge of ' ' Indicated. Use	Correspondence ation form of a Customer E PRINTED ON	2. For printing on the (1) the names of up or agents OR, alterna (2) the name of a sin registered attorney o 2 registered patent at listed, no name will t FHE PATENT (print or t data will appear on the T a substitute for filing a (B) RESIDENCE: (CT)	to attive agle or ag ttori be p type pat an a	3 registered patent ely, firm (having as a gent) and the name eys or agents. If a rinted.	memb s of up to nam	er a 2		at has been filed for
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NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) v tes Pate	vill not be accepted and Trademark	from anyone other that Office.	n th	e applicant; a regis	stered a	ittorney or agent; or th	e assig	nee or other party in
Authorized Signature						Date				
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



Houston, TX 77056

UNITED STATES PATENT AND TRADEMARK OFFICE

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Air Liquide			RODRIGUEZ	, WILLIAM H	
Intellectual Proper	ty Department		ART UNIT	PAPER NUMBER	
Suite 1800 2700 Post Oak Blvd			3741 DATE MAILED: 03/23/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 724 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 724 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/564,310	SAULNIER, BERNA	RD			
Examiner	Art Unit				
William H. Rodríguez	3741				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the preliminary amendment filed on 1/11/2006.
- 2. The allowed claim(s) is/are 14-26.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date 1/11/2006
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. ☐ Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

DETAILED ACTION

This is the first office action in response to the above identified patent application filed on 01/11/2006.

Allowable Subject Matter

Claims 14-26 are allowed.

With respect to claim 14, the following is an examiner's statement of reasons for allowance: the prior art of record neither discloses nor makes obvious the combination set forth in the independent claims, and especially does not show "to heat the nitrogen-enriched gas stream, heat exchange occurs between the fraction of incoming air issuing from the gas turbine and a liquid fraction to be heated in a first heat exchanger, in order to obtain a heated liquid fraction, this heated liquid fraction is added to a liquid mixture fraction, in order to obtain a liquid fraction to be cooled, and heat exchange occurs between this liquid fraction to be cooled and the nitrogen-enriched gas stream in a second heat exchanger", in combination with the other claim limitations.

With respect to claim 21, the following is an examiner's statement of reasons for allowance: the prior art of record neither discloses nor makes obvious the combination set forth in the independent claims, and especially does not show "means for heating the nitrogen-enriched gas stream, characterized in that these heating means comprise a first heat exchanger, in which the first incoming air supply means circulate, intake means for a liquid fraction to be heated, terminating at the inlet of the first heat exchanger, means for removing a heated liquid fraction, communicating with the outlet of the first heat exchanger, a second heat exchanger, in which means for removing the nitrogen

enriched gas stream circulate, intake means for a liquid fraction to be cooled, communicating with the inlet of the second heat exchanger, and means for removing a cooled liquid fraction, communicating with the outlet of the second heat exchanger, and in that the means for removing the heated liquid fraction communicate with the intake means for the liquid fraction to be cooled", in combination with the other claim limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cuff can be reached on 571-272-6778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3741

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Rodríguez/ Primary Examiner, Art Unit 3741